

## AMERICAN INTELLIGENCE.

## ORIGINAL COMMUNICATIONS.

*Case of Puerperal Convulsions from Albuminuria, in which Chloroform was successfully used, with Remarks.* By CHAS. A. LEE, M. D.—Mrs. F. T., aged 21, of very small frame and feeble constitution, was taken with labour pains with her first child, May 4, 1860. She had for several weeks presented a very leuco-phlegmatic appearance, her face swollen and of almost an alabaster colour, feet and ankles also swollen, otherwise apparently healthy, although troubled more or less with headache. She was able to take exercise, and the day before she was confined she walked nearly a mile. On examining the urine it was excessively loaded with albumen, containing by far the largest amount I have ever found in any case whatever. Fearing convulsions, I had procured a quantity of pure chloroform, of Squibb's manufacture, and used it in moderation for three hours before delivery, and giving it during the few last pains to the extent of producing complete unconsciousness. Labour pains commenced at 7 o'clock A. M., and delivery took place at 3 P. M. It was given throughout in quantity sufficient to produce perfect tranquillity, applying it as soon as the first indications of a pain were perceived, and withdrawing it when over.

Several times before the labour was completed, there were indications of approaching convulsions, such as turning up of the eyes, contractions of the hands, and involuntary twitchings, which were at once removed by the inhalation of a small quantity of chloroform. There was but very slight discharge of blood on delivery of the after-birth, certainly not more than four ounces altogether; the placenta having been spontaneously detached, was removed about half an hour after the child was born. The patient, on awaking a few minutes after the expulsion of the child, was surprised and gratified to find that all was over, and expressed herself as perfectly comfortable. After remaining about an hour, I left to visit some other patients, and on my return in an hour and a half after, found that she had had two very violent convulsions; the first about half an hour after I left the house. It came on suddenly, without any warning or premonitory symptoms whatever, and lasted two or three minutes. Soon after entering the room another very severe convulsion occurred, which was followed in an hour by another, and in the course of the next twelve hours as many as ten more. Having employed the usual means, with the exception of bleeding, general or local, and the fits increasing in severity and frequency, I procured a quantity of pure chloroform, and stationed myself at the bed-side, which I scarcely left for the next forty-eight hours. The patient, I should have stated at first, retained her consciousness between the fits, but latterly remained perfectly comatose, and could not be roused. The convulsions were of an epileptiform character. During the attack the face was distorted by spasmodic contractions, the pupils dilated, the eyes agitated and turned upwards, the tongue protruded, and the under jaw closed with such violence that the tongue was badly bitten before any precautionary measures were taken, all the muscles of the body seemed thrown into violent and irregular action, the limbs jerked in all directions, and it

seemed as if every joint would undergo dislocation. The expiration was irregular, the pulse very frequent and feeble. The paroxysms fortunately were not of long duration, the longest not exceeding five minutes.

After commencing the use of the chloroform but one paroxysm occurred, and that was during my absence from the bedside. About half a minute before the convulsion began, some premonitory symptoms appeared, such as turning up of the eyes, grasping or contraction of the hand and fingers, closing of the teeth, and slight general agitation. As soon as any of these symptoms appeared, about a drachm of chloroform was applied to the mouth and nose on a handkerchief, and two or three inspirations were enough to cause entire relaxation, and a removal of all the threatening symptoms. The control exercised by the chloroform over the morbid condition, or exciting cause of the paroxysms, was perfect and complete; nor was the pulse rendered more frequent or feeble in consequence of its use. The vital functions were all carried on with regularity. Its use was discontinued as soon as the threatening symptoms above mentioned disappeared, which was about forty-eight hours after delivery. On examining the urine at the end of that time, it was found to be free from albumen.

The patient remained wholly unconscious all this time, and for nearly as long a period afterwards. The pulse most of the time ranged from 150 to 180 in a minute, much of the time too feeble and frequent to be counted; it, however, gradually came down, so that by the fifth day after delivery it was but 120. Life was sustained by giving essence of beef, brandy, carb. ammonia, wine, &c., at regular intervals. It is now twenty-two days since her confinement, and she is progressing as favourably as could be desired; sitting up a good part of the day and nursing her infant, which has gained two pounds since birth. In all, about fifteen ounces of chloroform were used.

*Remarks.*—No reasonable person, I think, can doubt for an instant that chloroform was the means of saving life in the instance above related; after all other means had entirely failed, life nearly extinct, the paroxysms becoming more and more frequent, and all hope of saving the patient nearly abandoned, the anæsthetic powers of chloroform were called into requisition, and with absolute and perfect success. It seemed to be the agent expressly made for just such an emergency; for it met most fully and satisfactorily all the indications of the case, and rescued the patient from the very jaws of death. There is every reason to believe that it prevented an attack of convulsions before parturition was completed. There were all the premonitory symptoms of a paroxysm present, the same as preceded the fits after delivery; but on the prompt use of chloroform they instantly disappeared: and this fact, taken in connection with its effects in other similar cases, makes me doubt very much the propriety of the rule laid down by Professor Henry Miller, of Louisville (*The Principles and Practice of Obstetrics*, Philada., 1858, p. 518), in such cases, as follows:—

“From the very nature of the disease, and the circumstances in which its attack is made, we should expect that there can be no security for the mother except by delivery, originating in the peculiar condition of the womb during parturition, nothing but a total change of this condition, such as delivery brings about, can be expected to put a stop to the convulsive paroxysms.

“With every returning uterine contraction, the equilibrium of the circulation is disturbed, and irritation is propagated anew, from the cervical nerves to the true spinal system, and thus the disease must be kept up, in spite of all the resources of ordinary therapeutics. This is, in effect, admitted, by the most sanguine advocates of the lancet, even by Gooch and Dewees, who advise delivery

by the forceps, as soon as it is practicable, now, I go a step further and contend that, where the mother is placed in the fearful jeopardy supposed in the outset of these remarks, it is lawful, nay, it is our imperative duty, to deliver by craniotomy, whether we have complete assurance of the death of the child or not."

In the first place, it may be remarked that it is an entire assumption, unsupported by any known facts, that the cause of puerperal convulsions consist "in a peculiar condition of the womb during parturition." There is no subject in regard to which greater discrepancy of opinion exists than that of the remote and proximate causes of puerperal convulsions. Scarcely any two writers have expressed the same opinions. A very common opinion among medical men is, that the principal exciting cause is congestion of the cerebral vessels, or pressure on the brain, while Dr. Collins thinks we are quite ignorant as yet of what the cause may be. (*Treat. on Midwifery.*)

Puerperal, like all other convulsions, may be centric or eccentric, and the stimulus mechanical or emotional. The centric causes may be intra-vertebral, or intra-cranial, or both. Pressure on the brain from fulness of the vessels, a clot of blood, or collection of serum, may, by counter pressure on the medulla oblongata, cause convulsions. So also, similar causes acting on the spinal meninges, and medulla, produce the same effect. In like manner, an opposite condition, a want of a proper supply of blood to these central organs of the nervous system, will cause convulsions; as we see in cases of fatal uterine hemorrhage, or in animals bled to death. But the most important and most frequent of all these causes, is the constitution of the blood. This fluid becomes changed from its normal condition, during utero-gestation, by the imperfect depurating action of the secretory and excretory organs, caused chiefly by want of proper exercise, and the mechanical pressure of the gravid uterus on the intestines, the renal vessels and nerves, and the kidneys. The blood, moreover, does not undergo thorough oxygenation, from the pressure upward, preventing the free action of the diaphragm. But chiefly does the blood become a morbid stimulant to the spinal system, in consequence of the loss of albumen by the urine and the retention of the urea and other salts in the blood, causing the now well known affection albuminuria, we have no accurate statistics, showing the proportion of cases of convulsion dependent upon this condition of the blood, but it is very safe to say, that in a vast majority, especially of primipara, it is the exciting cause. Thus, Dr. Lever remarks, "I have carefully examined the urine in every case of puerperal convulsions that has since come under my notice, both in the Lying-in Charity of Guy's Hospital and in private practice, and in every case but one the urine has been found albuminous at the time of convulsions. I further have investigated the condition of the urine in upwards of fifty women, from whom the secretion has been drawn during labour by the catheter; great care being taken that none of the vaginal discharges were mixed with the fluid; and the result has been, that in no cases have I detected albumen except in those in which there have been convulsions, or in which symptoms have presented themselves, which are readily recognized as precursors of puerperal fits," and "this has been confirmed by numerous writers on this subject, as Simpson, Le-groux, Blot, and others." That the mechanical pressure upon the kidneys, by causing congestion of these organs, is the cause of albuminous urine, can scarcely admit of doubt, inasmuch as this condition is met with most frequently in primipara, and disappears in two or three days at furthest after parturition. There is no evidence whatever to show that it is dependent in such cases on granular degeneration as has been maintained by some.

It is evident, that the depuratory actions of the kidneys should be active during the puerperal state, in order to eliminate the *debris* of the foetal and maternal system, and thus preserve the health of the mother. It is no less evident that the causes already mentioned, tend to impair the excretory functions, and produce that condition of the circulating fluids, as to predispose to, or excite convulsive action. In regarding the state of the blood circulating in the spinal centre, as the most frequent cause of puerperal convulsion, we do not deny the influence, of eccentric or reflex causes in certain cases, such as irritation of the uterus itself, and the uterine passages; irritation of intra-cranial excitor nerves; irritation of the ovaries; of the intestinal canal, the stomach, the bladder, and possibly the cutaneous nerves, though several of these causes may act together, and centric and eccentric causes be combined in producing the result. In some cases, it may be difficult to decide which are the remote and which the exciting causes; or, whether the same cause may not be both predisposing and exciting. But in either case, I believe it will be found that chloroform is, in a vast majority of cases, the sheet anchor of our reliance.

In the case which I have briefly sketched, the prognosis was nearly hopeless. The patient was of very feeble constitution, very slight frame, a highly nervous temperament, the urine loaded with albumen, and she had lost a brother of the age of 14, a few months previously, of albuminuria. I am fully aware that, in a general rule, it would not be safe to rely on a single case for guidance in the management of this dangerous affection, but I was too much gratified with the action of chloroform in this case, and I think it well worthy of being communicated.

*Case of Poisoning by Strychnia; Use of Chloroform.* By J. R. SMITH, St. Mary's, Co. of Perth.—In November, 1857, I was called to see a young man by the name of Daniel Reardon, in this place, who, it was supposed, had been frozen. Upon examination, I discovered the symptoms of poisoning by strychnia. The muscles were powerfully contracted, the limbs stiffened; the jaws locked, difficult respiration, pulse small and frequent; from the severity of the symptoms I did not think it possible for the man to recover. The first remedy, which suggested itself as the best, was chloroform, which I administered by inhalation sufficiently to relax the muscles to admit of easy flexion of the legs and arms; respiration then became quite natural, the pulse less frequent and more perceptible; the chloroform was then withdrawn till the tetanic symptoms returned, and again applied and alternately withheld till the effects of the strychnia passed away, which was about ten hours. I first saw my patient in the evening at nine o'clock, and at seven next morning consciousness returned; the chloroform was then withheld. An emetic was then given, and afterwards a purgative. The man became gradually convalescent, his appetite and strength returning, till two days afterwards, when symptoms of the strychnia again appeared, which, however, were not alarming. After this; recovery was very rapid. This man is now a soldier in the Canadian 100th regiment. Twenty-four ounces of chloroform were used, though no doubt much was lost from the sponge, my guide in the use of the chloroform being such as to produce a slight relaxation of the inferior maxillary and easy flexion of the upper and lower extremities. It appears from the statement of the man himself that he was a hunter and used strychnia in destroying wolves and foxes, and in a temporary fit of madness from the use of spirits took a dose of the poison himself in a glass of liquor. A small vial containing strychnia was found upon his person.

*Treatment of Pneumonia.* By L. M. LAWSON, M. D.—In my paper on the Treatment of Inflammation, published in the Jan. number of the *Am. Journ. Med. Sci.*, it was stated that of 37 cases of pneumonia, admitted into the Marine Hospital, Louisville, Ky., 18 died. It was also stated that Dr. Austin Flint had charge of the hospital during the winter, and that his treatment was reported to have been mainly the expectant. I was unable to obtain the exact facts, as no records were kept by the resident physician; but from the statements made to me the inference appeared unfavourable to the expectant method of treatment.

Dr. Flint has just informed me, however, that his term of service extended from October to January, and that only *two* cases of pneumonia came under his care during that period. It affords me pleasure to make this correction, which is due to Dr. Flint.

*Rhubarb in Suppurating Burns.*—Dr. SAMUEL R. RITTENHOUSE, of Macunzie, Lehigh Co, Pa., writes to us that of all the applications he has ever employed for suppurating burns none has been so prompt and efficient in its action as powdered rhubarb mixed with lard. He uses one part by weight of rhubarb with two of fresh lard, which is to be spread on linen and applied to the suppurating surface.

## DOMESTIC SUMMARY.

*Fistulous Ulcer in front of the Larynx.*—Dr. JOHN WATSON records (*American Med. Times*, June 2, 1860) the two following interesting cases of this affection.

CASE 1. On the 6th of April, 1838, I saw in consultation with a gentleman of considerable surgical experience, a young lady, Miss C., about twenty years of age, who for the previous two or three years had been troubled with a papillary ulcer in front of her neck immediately over the thyroid cartilage, and from the centre of which there had been a continual weeping of a glutinous transparent colourless fluid, like inspissated synovia. Several attempts had been made by the gentleman in attendance, and by others, to close this ulcer, but without effect. Milder means proving of no avail, the ulcerated integument had been excised, under the hope that a newly exposed surface in the healthy skin might take on the process of cicatrization. But after the wound had contracted to a small point, the glutinous discharge, which had not been arrested, continued to keep the parts from closing. Again a second and more severe operation had been undertaken, in which the integuments for a wide space around the ulcer were excised, and the edges of the wound were drawn together by suture, so as to favour union by the adhesive process. The only effect of this measure was to leave an unsightly transverse cicatrix, which greatly disfigured the exposed surface. When I first saw the patient, the ulcerated opening in the centre of this cicatrix was hardly large enough to admit the point of a delicate probe. But after penetrating through the orifice, the instrument slipped readily onwards for about an inch under the integuments, in the median line, upwards in front of the thyro-hyoid ligament, to the border of the os hyoides, where it rested. On withdrawing the probe and grasping the parts along which it had passed, I could feel beneath the skin a delicate cord-like track of induration, such as might result from the indurated parietes of a narrow fistula.

After some deliberation, seeing that the true character of the case had not hitherto been appreciated, and bearing in remembrance that I had often cured obstinate fistulae in other parts of the body by injecting them with corrosive sublimate, I advised the gentleman in attendance, first, to inject the fistulous